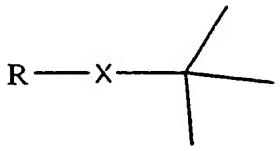
What is claimed is:

1. A pharmaceutical composition comprising:

a) at least one active agent; and

b) a skin penetration enhancer represented by the following Formula I:



I

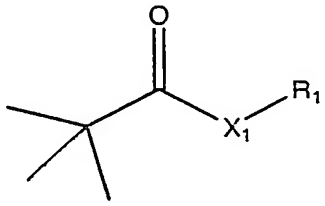
wherein: R represents a linear, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X represents a -(CO)O-, -O(CO)-, C=O, CONH, O, NHCONH, S, or S=O radical.

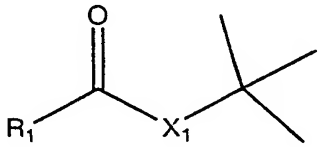
2. A pharmaceutical composition comprising:

a) at least one active agent; and

b) a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

3. The pharmaceutical composition according to claim 2, wherein the skin penetration enhancer comprises a compound of Formula IA.

4 The pharmaceutical composition according to claim 2, wherein the skin penetration enhancer comprises a compound of Formula IB.

5. The pharmaceutical composition according to claim 2, wherein R_1 represents a linear C6-C20 alkyl radical.

6. The pharmaceutical composition according to claim 2, wherein R_1 represents a linear C6-C16 alkyl radical.

7. The pharmaceutical composition according to claim 2, wherein R_1 represents a linear C6-C14 alkyl radical.

8. The pharmaceutical composition according to claim 2, wherein R_1 represents a linear C8-C14 alkyl radical.

9. The pharmaceutical composition according to claim 2, wherein R_1 represents an octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, or tetradecyl radical.

10. The pharmaceutical composition according to claim 2, wherein R_1 represents an octyl, decyl, dodecyl or tetradecyl radical.

11. The pharmaceutical composition according to claim 2, wherein X_1 represents an oxygen atom.

12. The pharmaceutical composition according to claim 2, wherein X_1 represents an N-H radical.

13. The pharmaceutical composition according to claim 2, wherein the skin penetration enhancer of formula IA or IB is decyl pivalate, dodecyl pivalate, tetradecyl pivalate, N-decyl pivalamide, N-dodecyl pivalamide, tert-butyl decanoate, tert-butyl laurate, or tert-butyl myristate.

14. The pharmaceutical composition according to claim 2, further comprising a pharmaceutically acceptable vehicle.

15. The pharmaceutical composition of claim 14, which is in the form of a liquid.

16. The pharmaceutical composition of claim 14, which is in the form of a cream.

17. The pharmaceutical composition of claim 14, which is in the form of a lotion.

18. The pharmaceutical composition of claim 14, which is in the form of an ointment.

19. The pharmaceutical composition of claim 14, which is in the form of a gel.

20. The pharmaceutical composition of claim 14, which is in the form of a spray.

21. The pharmaceutical composition of claim 14, which is in the form of an aerosol.

22. The pharmaceutical composition of claim 2, wherein said active agent comprises at least one compound selected from amorolfine, isoconazole, clotrimazole, econazole, miconazole, nystatin, terbinafine, bifonazole, amphotericin, griseofulvin, ketoconazole, fluconazole and flucytosine, salicylic acid, fezatione, ticlatone, tolnaftate, triacetin, zinc, or pyrithione.

23. The pharmaceutical composition of claim 2, wherein said active agent comprises at least one compound selected from papaverine, dioxyline, ethaverine, minoxidil, or nitroglycerin.

24. The pharmaceutical composition of claim 2, wherein said active agent comprises at least one compound selected from alprostadil (PGE1), prostacyclin (PGI2), dinoprost (prostaglandin F2-alpha), or misoprostol.

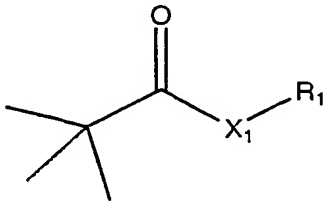
25. The pharmaceutical composition of claim 2, wherein said active agent comprises at least one compound selected from tolmetin, diclofenac, ketorolac, ibuprofen, naproxen, flurbiprofen,

ketoprofen, fenoprofen, oxaprozin, mefenamic acid, meclofenamic acid, fhilenamic acid, piroxicam, tenoxicam, phenylbutazone, oxyphenthatrazone, nabumetone.

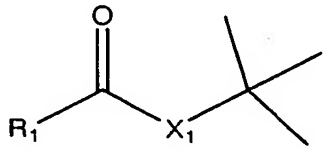
26. A pharmaceutical composition according to claim 2, comprising:

a) from about 1 wt.% to about 15 wt.% buspirone hydrochloride; and

b) a penetration enhancing amount of a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

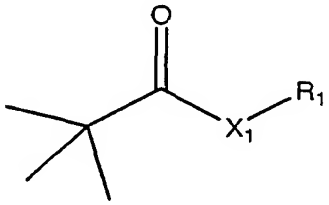
R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

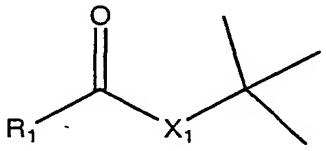
27. A pharmaceutical composition according to claim 2, comprising:

a) from about 1 wt.% to about 10 wt.% ibuprofen; and

b) a penetration enhancing amount of a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

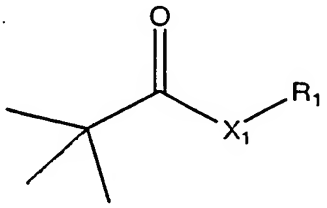
R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

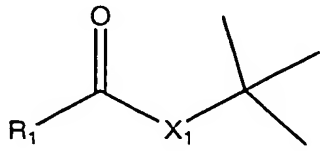
28. A pharmaceutical composition according to claim 2, comprising:

a) from about 0.5 wt.% to about 5 wt.% testosterone; and

b) a penetration enhancing amount of a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

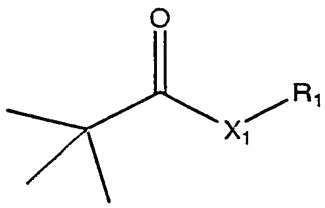
R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

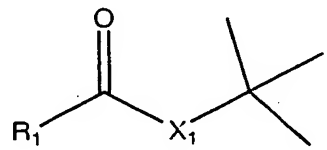
29. A pharmaceutical composition according to claim 2, comprising:

a) from about 0.5 wt.% to about 5 wt.% PGE-1; and

b) a penetration enhancing amount of a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

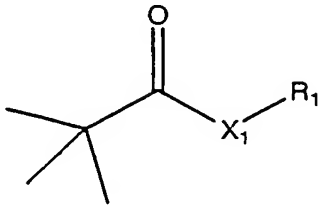
R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

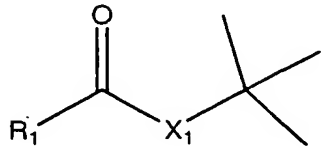
30. A pharmaceutical composition according to claim 2, comprising:

a) from about 1.5 wt.% to about 3.5 wt.% hydroquinone; and

b) a penetration enhancing amount of a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

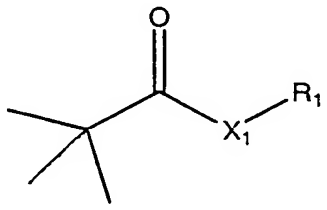
R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

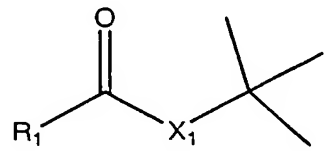
31. A method for forming a pharmaceutical or cosmetic composition comprising, mixing:

a) from about 1 wt.% to about 10 wt.% of an active agent; and

b) a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

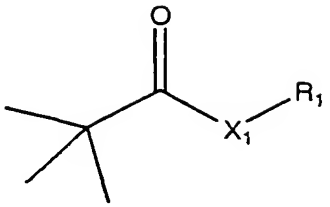
R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

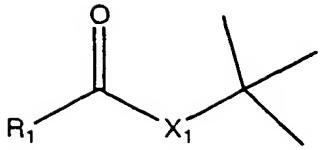
32. A method of administering an active agent to an animal in need thereof comprising topically applying to said animal a pharmaceutical composition comprising:

a) an active agent ; and

b) a skin penetration enhancer represented by the Formulas IA or IB



IA



IB

wherein:

R_1 represents a linear or branched, saturated or unsaturated, substituted or unsubstituted hydrocarbyl radical; and

X_1 is either an oxygen atom or an NH radical.

33. The method of claim 32, wherein said animal or plant is a human.

34. The method according to claim 32, wherein said active agent is a pharmacologically active agent.

35. The method according to claim 32, wherein said active agent is a cosmetic agent.

36. The method according to claim 32, wherein said active agent is a bronchodilator, diuretic agent, antibacterial agent, antifungal agent, antiacne agent, sedative, tranquillizer, psychostimulant, anxiolytic agent, oestrogen, hormone, ovulation inducer, antipyretic agent, narcotic analgesic, hypoglycaemiant, antispasmodic agent, antimalaria agent, beta-blocker, antiarthritic agent, non-steroidal antiinflammatory drug, anti-osteoporotic agent, skin bleaching agent, vasodilator, prostaglandin, corticosteroid, steroidal agent, anti-hypertensive agent, antiparkinsonian agent, antimigraine agent, antiulcer agent, anticancer agent or nutritional agent.

37. The method according to claim 32, wherein the active agent is at least one compound selected from the group consisting of: sodium cromoglycate, salbutamol, theophylline, furosemide, hydrochlorothiazide, penicillin, tetracycline, oxytetracycline, chlortetracycline, chloramphenicol, amorolfine, isoconazole, clotrimazole, econazole, miconazole, nystatin, terbinafine, bifonazole, amphotericin, griseofulvin, ketoconazole, fluconazole and flucytosine, salicylic acid, fezatione, ticlatone, tolnaftate, triacetin, zinc, pyrithione, erythromycin,

pentobarbital, secobarbital, codeine, 3-(2-aminopropyl)indole acetate, 3-(2-aminobutyl)indole acetate, diazepam, chlordiazepoxide, reserpine, chlorpromazine, buspirone hydrochloride thiopropazate, oestradiol, oestriol, oestrone, ethinyloestradiol, mestranol, stilboestrol, dienoestrol, epioestriol, estropipate, zeranol, androstenediol, androisoxazole, testosterone, dihydrotestosterone, dehydroepiandrostenone, 17 beta-estradiol, estradiol-3,17-diacetate, estradiol-3-acetate, estradiol-17-acetate, estradiol-3,17-valerate, estradiol-3-valerate, estradiol-17-valerate, ethinyl estradiol, estrone, progesterone, norethindrone, norgestrieone, norgestadienone, norgestrel, norgestimate, progestogenic acid, dihydroprogesterol, nomagesterol, clomiphene, acetylsalicylic acid, salicylamide, sodium salicylate, methyl salicylate, morphine, glypizide, glyburic, chlorpropamide, insulin, atropine, methscopolamine bromide, 4-aminoquinoline, 9-aminoquinoline, metoprolol, sulindac, tolmetin, diclofenac, ketorolac, ibuprofen, naproxen, flurbiprofen, ketoprofen, fenoprofen, oxaprozin, mefenamic acid, meclofenamic acid, piroxicam, tenoxicam, phenylbutazone, oxyphenthatrazone, nabumetone, etidronate, tiludronate, ascorbic acid, hydroquinone, dipyridamole, trinitrine, isosorbide dinitrate, misoprostol, papaverine, dioxyline, ethaverine, minoxidil, nitroglycerin, betamethasone, betamethasone valerate, cortisone, dexamethasone, dexamethasone 21-phosphate, fludrocortisone, flumethasone, fluocinonide, fluocinonide desonide, fluocinolone, fluocinolone acetonide, fluocortolone, halcinonide, halopredone, hydrocortisone, hydrocortisone 17-valerate, hydrocortisone 17-butyrate, hydrocortisone 21-acetate methylprednisolone, prednisolone, prednisolone 21-phosphate, prednisone, triamcinolone, triamcinolone acetonide, cortodoxone, fluoracetonide, fludrocortisone, difluorsone diacetate, flurandrenolone acetonide, medrysone, amcinafel, amcinafide, chloroprednisone, clorcortelone, descinolone, desonide, dichlorisone, difluprednate, flucloronide, flumethasone, flunisolide, flucortolone, fluoromethalone, fluperolone, fluprednisolone, meprednisone, methylmeprednisolone, paramethasone, cortisone acetate, hydrocortisone cyclopentylpropionate, cortodoxone, flucetonide, fludrocortisone acetate, flurandrenolone acetonide, medrysone, amcinafal, amcinafide, betamethasone, betamethasone benzoate, chloroprednisone acetate, clocortolone acetate, descinolone acetonide, desoximetasone, dichlorisone acetate, difluprednate, flucloronide, flumethasone pivalate, flunisolide acetate, fluperolone acetate, fluprednisolone valerate, paramethasone acetate, prednisolamate, prednival, triamcinolone hexacetonide, cortivazol, formocortal, nivazol;

propanolol, prazosin, diltiazem, clonidine, methyldopa, selegiline, dihydroergotamine, cimetidine, tamoxifen or cis-platin.

38. The method according to claim 32, wherein the active agent is at least one compound selected from hydromorphone, hydroquinone, tentanyl, nalozone, nalbuphine, buprenorphine, methylphenidate, selegiline, pimozide, buspirone, oxybutynin, tacrolimus, mupirocin, bromocryptine, naproxen, diclofenac, ibuprofen, prostaglandin E1, testosterone, terbinafine or econazole.